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09/533,685	03/23/2000	Michael Lee Hearn	600.1040	9876

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EXAMINER

DEXTER, CLARK F

ART UNIT PAPER NUMBER

3724

DATE MAILED: 09/22/2004

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SEP 22 2004  
GROUP 3700

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Application Number: 09/533,685  
Filing Date: March 23, 2000  
Appellant(s): HEARN, MICHAEL LEE

\_\_\_\_\_  
William C. Gehris  
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed June 10, 2004.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

Appellant's brief includes a statement that the claims do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) *Prior Art of Record***

3,522,762	Sauer	8-1970
3,866,497	Wolfberg et al.	2-1975
4,249,441	Sturtz	2-1981

5,103,703

Littleton

4-1992

**(10) *Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

Prior Art Rejection Under 35 USC 102

Claims 22, 30, 33 and 36 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Wolfberg et al., pn 3,866,497.

Wolfberg et al. discloses the invention as follows:

a first cutting cylinder (e.g., 112) having a first segmented cutting blade (e.g., 114) with axially spaced first blade edges and a first cutting cylinder nipping surface (e.g., the surface adjacent blades as shown in Figures 6 and 10) extending circumferentially about the first cutting cylinder from the first blade edges; and

a first anvil cylinder (e.g., 116) having a first anvil cylinder nipping surface extending circumferentially about the first anvil cylinder;

the first cutting cylinder nipping surface and the first anvil cylinder nipping surface providing a first nip for the web about the first segmented cutting blade.

Prior Art Rejections Under 35 USC 103

Claims 23-25, 34, 35, 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolfberg et al., pn 3,866,497, in view of Sturtz, pn 4,249,441 and Littleton, pn 5,103,703.

Art Unit: 3724

Wolfberg discloses a cutting device with almost every structural limitation of the claimed invention as described above but lacks a urethane outer coating on the anvil cylinder and on the cutting cylinder. However, the Examiner takes Official notice that it is old and well known in the art to provide an outer coating of urethane on both cutting cylinders and anvil cylinders for various well known benefits including enhancing the friction characteristics of the outer surface of the cylinder; for example, Sturtz discloses one example wherein a urethane coating is provided as an outer layer of both an anvil cylinder and a cutting cylinder for enhancing the frictional forces of the particular cylinder, in this case between the cylinder and the work piece. Littleton discloses another example of an anvil cylinder (e.g., 38) having a urethane outer coating. Therefore, it would have been obvious to one having ordinary skill in the art to provide an outer coating of urethane on one or both of the cutting cylinders and anvil cylinders of Wolfberg for various well known benefits including that described above.

Claims 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolfberg et al., pn 3,866,497, in view of Sauer, pn 3,522,762, Sturtz, pn 4,249,441 and Littleton, pn 5,103,703.

Wolfberg discloses a cutting device with almost every structural limitation of the claimed invention but lacks a two-part metallic hub including a urethane layer bonded to the outer surface of the hub. However, the Examiner takes Official notice that it is old and well known to provide a two-part metallic hub, and further to coat such a hub with urethane. In particular, the Examiner takes Official notice that it is old and well known in

Art Unit: 3724

the art to form hubs in various configurations regarding the number of parts thereof to facilitate assembly, maintenance or other well known design considerations. Further, for the reasons described in the rejection above, it is old and well known in the art to provide an outer coating of urethane on cylinder hubs. Sauer discloses one example of such a two-part metallic hub. Additionally, Sturtz discloses one example wherein a urethane coating is provided as an outer layer of both an anvil cylinder and a cutting cylinder for enhancing the frictional forces of the particular cylinder, in this case between the cylinder and the work piece. Littleton discloses another example of an anvil cylinder (e.g., 38) having a urethane outer coating. Therefore, it would have been obvious to one having ordinary skill in the art to provide a two-part metallic hub, and further to coat such a hub with urethane for the well known benefits including those described above.

### **(11) *Response to Argument***

#### **Arguments directed to Group I**

It is respectfully submitted that the prior art, specifically Wolfberg et al., discloses every structural limitation of the claimed invention as described above. Appellant appears to be relying heavily on one specific meaning given to the term "nip." That is, appellant argues that

"A nip in a printing press is a location where the web is squeezed or compressed together, typically by two cylinders. The web is compressed so that the web in the nip does not slip or move with respect to the cylinders in a way that could effect print-to-print or print-to-cut register."

Art Unit: 3724

The Examiner respectfully submits that (1) such a definition is an unduly narrow interpretation of the term, and (2) Wolfberg et al. meets the definition to the extent claimed.

First, appellant has provided no evidence that the definition of “nip” is restricted as argued. The term “nip” is often used in the cutting art, particularly the rotary cutting art, to describe the area where the cutting blade contacts the anvil cylinder; in other words, where the cut is made. Evidence of such a definition is found throughout the cutting arts. One example of a patent with such a definition is Armelin, pn 3,916,749 (see column 2, lines 17-21 and Figure 1, wherein both cylinder surfaces do not contact the workpiece).

Second, both cylindrical surfaces of Wolfberg et al. contact (and thus compress to at least some extent) the workpiece (e.g., see Figures 6 and 10).

Therefore, Wolfberg et al., using the broadest reasonable interpretation of the term “nip,” clearly discloses the claimed invention.

In the eighth paragraph on page 4 of the appeal brief, appellant argues that “no mention is made of any of the drums nipping the web.” However, the question is not limited to what is explicitly described in the patent, but rather what the reference teaches to one having ordinary skill in the art. Clearly, Wolfberg et al. teaches a nip to the extent claimed (e.g., see Figures 6 and 10).

In the ninth paragraph on page 4 of the appeal brief, appellant argues that the web is moved by drive rollers at the periphery of the web. However, there is nothing in the claims that requires the cutting and/or anvil cylinders to be driven, or to drive the

web. The claims only require a nip between the cutting and anvil cylinders. It is respectfully submitted that such a nip is taught by Wolfberg et al.

In the paragraph bridging pages 4 and 5 of the appeal brief identified by numeral 1, appellant argues that there may somehow be relative movement between the pins and the drums and such would cause the edges of the business forms to tear away. Appellant concludes that nipping is not desired with the business forms having an edge pin conveying device. However, it is respectfully submitted that appellant has provided no evidence or support for such relative movement. There is no discussion in the patent that the cylinders should not contact the workpiece so as to avoid such a malfunction. What the patent does teach is that the cylindrical surfaces contact the workpiece, this is particularly taught in Figure 6.

In the paragraph on page 5 of the appeal brief identified by numeral 2, appellant argues that the nipping action and thus compression at the drum surfaces clearly would cause the carbon sheets to make black marks all over the business forms and concludes that one having ordinary skill in the art would have understood that Wolfberg does not provide any nip at the cutting device. Again, it is respectfully submitted that appellant has provided no evidence or support for such an argument. For example, it is not clear as to what amount of compression necessary to cause such black marks. Again, there is no discussion in the patent that the cylinders should not contact the workpiece so as to avoid such an occurrence. What the patent does teach is that the cylindrical surfaces contact the workpiece (again, see Figure 6).



Art Unit: 3724

Arguments directed to Group II

In the first paragraph on page 6 of the appeal brief, appellant concludes that none of the prior art shows "a first cutting cylinder nipping surface extending circumferentially about the first cutting cylinder from the first blade edges" having a urethane outer coating as claimed in claim 23. However, it is respectfully submitted that the prior art meets the limitations set forth in the claims. First, Wolfberg et al. clearly teaches "a first cutting cylinder nipping surface extending circumferentially about the first cutting cylinder from the first blade edges." Second, Sturtz clearly supports that it is well known in the art to provide a urethane coating on the first cutting cylinder nipping surface (e.g., see Figure 1).

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



Clark F. Dexter  
Primary Examiner  
Art Unit 3724

cfd

September 20, 2004

Conferees:

Allan Shoap (SPE, 3724)



Greg Vidovich (SPE, conferee)



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